

IN THE TITLE

Substitute the title as

“RETIRING INSTRUCTIONS THAT MEET THE EARLY-RETIREMENT CRITERIA
TO IMPROVE COMPUTER OPERATION THROUGHPUT

RECEIVED

APR 28 2004

Technology Center 2100

IN THE CLAIM

- 1 1. (Currently Amended) A method for retiring instructions processed through various
2 processing stages including an instruction queue, comprising the steps of:
3 after processing the instructions until the instruction queue is full;
4 performing the following steps
5 stopping processing the instructions in the various processing
6 stages; and
7 for each instruction in the instruction queue, if the instruction meets
8 the criteria for early retirement, then
9 terminating the instruction; and
10 updating a system processing the instruction to
11 reflect that the instruction has been
12 terminated;
13 wherein the criteria for early retirement is met when at least one of the
14 following conditions is met: continued processing of the instruction
15 does not change the architectural state of the system processing the
16 instruction; continued processing of the instruction has no effect on
17 the behavior of a program running the instruction; the instruction
18 has completed its function without completing its full pipeline.